

**REMARKS**

Applicant respectfully requests reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

In this response, Applicant has amended claim 7; support for these amendments to claim 7 are supported, *inter alia*, by paragraphs [0036], [0055], and [0034] of the specification as originally filed. Claims 10 and 12-14 have been canceled. Claims 15-16 have previously been withdrawn. Claim 17 has been added; support for claim 17 is found, *inter alia*, in paragraphs [0027] and [0022] of the specification as originally filed.. Following entry of the amendments, claims 7-9, 11 and 17 are currently pending in the application.

**Rejection Under 35 U.S.C. § 112, Second Paragraph**

Claims 10 and 12-14 stand rejected under 35 U.S.C. § 112, second paragraph. Without agreeing with these rejections, and in order to expedite allowance of the application, claims 10 and 12-14 have been cancelled, thus making these rejections moot.

**Rejections Under 35 U.S.C. § 103(a)**

The Office Action rejects claims 7-14 as unpatentable over U.S. Patent Application Publication No. 2003/0093950 to Goebel in view of U.S. Patent No. 6,162,558 to Borup, under Section 103. Applicant respectfully traverses this rejection for the following reasons and other reasons that will be come apparent.

First, Goebel does not disclose any means for stopping the PrOx air 92 supply to the PrOx reactor. By the operation of Goebel's valve 46 and valve 44, the air 36 (reformer air) can be stopped but the air 92 (PrOx air) to the PrOx reactor cannot be stopped (*see* Goebel, Figures 1,3,4).

Accordingly, a key element of claim 1 is neither disclosed nor suggested in Goebel. Specifically, claim 1 consists of the elements of:

- (A) supplying said reformate, said reformate being formed in a reforming step; and,
- (B) without supplying air for selective oxidation to the selective oxidation catalyst.

Goebel does not disclose element (B), namely, the stopping of the supply of air for selective oxidation. Further, Goebel does not discuss any benefits for stopping of the air supply.

Second, according to the fuel cell structure disclosed in Goebel, when supply of the air 36 is stopped by valves 46, 44, the supply of reformate gas 54 is also stopped (Goebel,

Figures 1,3,4). Thus, it is not disclosed in Goebel to supply a reformate to PrOx but also then not supplying air to PrOx.

Thus, contrary to the Examiner's indication (item 12 ), any means for a selective oxidation catalyst activating step of claim 1 are not disclosed by Goebel.

Third, Goebel does not disclose that a temperature of a selective oxidation catalyst is elevated to a temperature not lower than 120°C and not higher than 200°C in a temperature elevating step. In amended claim 1, because the selective oxidation catalyst activation step is conducted in the temperature range of 120°C to 200°C, the reduction treatment of the selective oxidation catalyst can be conducted efficiently as mentioned in the present application at paragraph 0036 as originally filed.

Fourth, in the secondary reference Borup, a selective oxidation catalyst activation step of claim 1 is not disclosed and Borup does not disclose that a reformate is supplied to activate a selective oxidation catalyst without supplying air for selective oxidation to the selective oxidation catalyst during start operation. In Borup, it is disclosed that the activation is conducted after calcination (Borup, column 7, line 62 to column 8, line 3), but, it is not disclosed that the activation is conducted during start operation. Calcination is a process conducted as a part of catalyst production and is not conducted as a start operation of a fuel stack cell. Thus the selective oxidation catalyst activating step during start operation of claim 1 is not disclosed by Borup. Also, in Borup, the activation is conducted at a temperature of about 260°C (Borup, column 8, lines 4 to 5), suitable for the activation after calcination.

In contrast, the activation step of claim 1 is conducted after the temperature of a selective oxidation catalyst is elevated to a temperature not lower than 120 °C and not higher than 200 °C as described in claim 1. This temperature range is suitable for the start operation (present application paragraph 0036).

Therefore claim 7 is not obvious over Goebel in view of Borup, and claims dependent from claim 7 are not also obvious over Goebel in view of Borup for the same reason.

Fifth, in referring to the Examiner's comment at item 14, Applicant notes that Goebel and Borup do not disclose nor suggest an electric heater wound around an outer periphery of a selective oxidation section filled with the selective oxidation catalyst (new claim 17).

**Conclusion**

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 C.F.R. §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing or a credit card payment form being unsigned, providing incorrect information resulting in a rejected credit card transaction, or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741. If any extensions of time are needed for timely acceptance of papers submitted herewith, Applicant hereby petitions for such extension under 37 C.F.R. §1.136 and authorizes payment of any such extensions fees to Deposit Account No. 19-0741.

Respectfully submitted,

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